Animation

Goal: To introduce you to VCS plot animation.

Reselect the "clt" Variable in the "Variable" selection window. This will reinitialize the "Dimension Manipulation Panel". Select the orange "Plot" button to display the "clt" data set. Make sure the graphics method selected is "Boxfill".

The contents of the VCS Canvas can be animated and controlled by command line or by a GUI.

Before viewing the animation editor, reset the time dimension to a smaller range for animate over. Set the time dimension range to start at "1980−1−1 0:0" and end at "1985−12−1 0:0". Then select the orange "Plot" button to display to replot the plot with the specified time dimension.

To view and control animation via the GUI, depress the "Option" menu to the right of "VCS Canvas 1". Then move the pointer over the "Animate..." item and select.

The "Animation" window will appear. See figure 40.

Save animation frames to a raster file:
To save animation frames, select the "Save" icon button located in the "Animation File Controls" section. Once selected, the "Save Animation to Raster File" window will appear. Specify the directory and enter the animation file name. When done, select the "Save" button. To create the animation frames, follow the "Create animation frames" instructions below.

Load animation frames from a raster file:
To load animation frames, select the "Load" button located in the the "Animation File Controls" section. Once selected, the "Load Animation from Raster File" window will appear. Specify the directory and raster file to be loaded for display. When done, select the "Open" button. To run the loaded animation, follow the "Run the animation" instructions below.

Create animation frames:
To create the animation frames, select the green "Create Images" button located in the the "Animation Control Buttons" section. The VCS Canvas will appear in front of all other windows and start the process to store each frame into memory. When it has completed the animation, the screen will appear blank. (To stop the creation of the animation prematurely, select the orange "Stop Creation" button located to the far right.)

Run the animation:
To run the animation, select the cyan "Run Animation" button. This will start the animation loop. See figure 41.

Stop the animation:
To stop the animation, select the orange "Stop Animation" button. This will stop the animation loop.

Slow down the animation:
Run the animation by selecting the "Run Animation" button. To slow down the animation, select the right "Pause animation" arrow button several times. The animation will slow each time the right arrow button is selected. Set the "Pause animation" value to 2 or 3.

Manually viewing each frame:
Select the "Stop Animation" button, if the animation is running. Then move the "Next frame" slider back and forth (or select the left or right arrow buttons) to view disired frames.

Animating over a specific region:
To zoom and pan over over a specified region, move the "Zoom" slider to the right. Set the "Zoom" value to 2 or 3. Now pan to the specified region (i.e., North America, Atlantic Ocean, Asia, etc.). Now select the "Run Animation" button to see the animation of the specified region. While animating, continue to zoom and pan.

When done with the animation, select the "Exit Animation Editor" located under the "File" menu. The "Options" menu will allow the user to set animation minimum and maximum values, animation mode, and animation direction.

Figure 40. VCS Canvas Animation GUI display results.

Figure 41. VCS Canvas animation display results.